

INTRODUCTION

This report suggests conservation strategies for the desert tortoise, Mohave ground squirrel and other special status plants and animals which could support the issuance of programmatic incidental take permits, “no surprises” assurances and biological opinions to the agencies and jurisdictions which are preparing the West Mojave Plan (Plan). These strategies are based on a review of current agency management which was conducted by the West Mojave Planning Team, the United States Fish and Wildlife Service (Service), and the California Department of Fish and Game (Department). Biologists evaluated the effectiveness of current management, identified management shortfalls, and suggested measures to address those shortfalls¹. Their findings and recommendations are presented herein.

The suggested strategies are intended to meet two planning needs. They allow state and federal land management agencies to implement their mandate to conserve and protect species of concern and habitats on public lands, a mandate which includes facilitating the recovery of these species. At the same time, the measures suggest a streamlined program to minimize and mitigate the impacts of projects on private lands. Thus the Plan will serve as both a “conservation” plan and a “mitigation” plan.

WHAT ROLE DOES THE EVALUATION REPORT PLAY IN THE WEST MOJAVE PLANNING PROCESS?

The Evaluation Report is not the “West Mojave Plan.” The formulation of the Plan is the responsibility of the Supergroup, including the 28 participating jurisdictions. The evaluation report is one of several resources which are being provided to the Supergroup for its use when it writes the Plan.

The West Mojave Plan is being prepared in four steps: (1) *Foundation* (assembling the best science reasonably available); (2) *Evaluation* (a review of the effectiveness of current agency management and suggestions for improvement); (3) *Supergroup writes the Plan*; and (4) *Environmental Impact Report and Statement (EIR/S)*. Step 1 was completed in 1998. Publication of this Evaluation Report marks the completion of Step 2.

Step 3 involves the writing of the Plan by the Supergroup. The Supergroup will accomplish this task using the suggestions presented by this report, together with the West Mojave scientific data base, map and literature library, the recently published *Current Management Situation of Special Status Species in the West Mojave Planning Area*

¹A summary of current management and identified shortfalls is presented for each species. A more detailed description of current management, biological opinions, incidental take permits and other matters concerning FESA and CESA may be found in the *Current Management Situation of Special Status Species in the West Mojave Planning Area (March 1999)*, which the reader is encouraged to consult.

(March 1999) (CMS), and the expertise brought to the process by the Supergroup.

The preparation of an EIR/S constitutes Step 4. It will identify the environmental impacts of the Supergroup's Plan. A Draft EIR/S and Plan will be released to the general public for a 90-day public review. Following this, a Final EIR/S will be published together with a Plan which incorporates, as appropriate, modifications suggested by the public.

A mandatory component of an application for incidental take permits issued pursuant to the federal and California endangered species acts (FESA and CESA) is a planning document known as a habitat conservation plan, or HCP. The West Mojave Plan will function as an HCP; as such, it must satisfy the incidental take permit issuance criteria of both FESA and CESA. Those criteria are presented in Tables I-1 and I-2. Table I-3 presents a brief summary of the content of a typical HCP, which could serve as a starting-point for the Supergroup when it writes the Plan.

The "issuance criteria" are critical. These standards **must be satisfied by the Plan** if it is to support the issuance of permits.

HOW IS THIS REPORT ORGANIZED?

Our intent is to enable the Supergroup to understand not only the conclusions reached by the evaluators, but also the process by which those findings and recommendations were developed. Accordingly, the discussion flows in a logical manner that mirrors the evaluation itself, beginning with a summary of current agency management and the biological needs of species, next suggesting strategies which could address management

Definitions

Take (FESA): Harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (Section 3 of FESA, as amended). "Harass" is further defined in federal regulations as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. "Harm" is further defined as an act, which may include significant habitat modification or degradation, where it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.

Take (CESA): Hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill. (Cal. Fish & Game Code Section 86.)

Incidental Take: Take that is incidental to, but not the purpose of, the carrying out of an otherwise lawful activity, or take that is inadvertent. Construction of transmission lines and installation of pipelines in occupied desert tortoise habitat are examples of "otherwise lawful activities" which have resulted in the take of tortoises in the planning area.

Incidental Take Permit: A permit issued by the Service that exempts a permittee from the take prohibition of section 9 of FESA (issued pursuant to section 10(a)(1)(B) of FESA) (a "Section 10" permit). Also a permit issued by the Department that exempts a permittee from the take prohibition of section 2081 of CESA (a "Section 2081" permit).

Habitat Conservation Plan: A planning document that is a mandatory component of an incidental take permit application, also known as an HCP.

shortfalls, and finally explaining why those strategies should succeed.

Because each plant or animal was evaluated separately, findings and recommendations are presented on a species-by-species basis in Chapters 2 through 6. To complement this species-driven approach, Chapter 1 presents an overview of the suggested conservation strategies from an ecosystem perspective, explaining how these measures could function collectively as a bio-regional conservation plan.

Table I-1
FESA Section 10(a)(2)(B) Permit Issuance Criteria

- (i) The taking will be incidental;
- (ii) The applicant will, to the *maximum extent practicable*, minimize and mitigate the impacts of such taking;
- (iii) The applicant will ensure that *adequate funding* for the plan will be provided;
- (iv) The taking will *not appreciably reduce the likelihood of the survival and recovery of the species in the wild*; and,
- (v) The measures, if any, required under [1539(a)(2)(A), “such other measures that the Secretary may require as being necessary or appropriate”] will be met, and [the Secretary] has received such other assurances as he may require that the plan will be implemented.... [emphasis added]

Table I-2
CESA Section 2081(b) Permit Issuance Criteria

- (1) The take is incidental to an otherwise lawful activity.
- (2) The impacts of the authorized take shall be *minimized and fully mitigated*. The measures required to meet this obligation shall be *roughly proportional* in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall *maintain the applicant’s objectives to the greatest extent practicable*. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.
- (3) The permit is consistent with any regulations adopted pursuant to Sections 2112 and 2114.
- (4) The applicant shall ensure *adequate funding* to implement the measures required by paragraph (2), and for monitoring compliance with, and effectiveness of, those measures. [emphasis added]

The discussion of each animal or plant is organized into five parts:

- **Evaluation Findings:** The methodology used to evaluate current management and formulate conservation strategies. Substantive conclusions of the evaluators are presented regarding the habitat and distribution of, and threats to, each species, current management, and identified management shortfalls.

- **Measurable Biological Goals and Objectives:** Broad guiding principles for the recommended conservation strategy. Goals and objectives are intended to (a) create benchmarks for developing conservation measures, (b) provide the rationale behind the Plan's terms and conditions, (c) promote an effective monitoring program, and (d) help determine the focus of an "adaptive management" strategy (that is, they ensure that the Plan can be modified to incorporate findings of the monitoring program). Biological goals may have associated biological objectives which represent specific, measurable targets for achieving the goal.
- **Anticipated Take:** Take is expressed in numbers of individual animals or acres of habitat. This section identifies a level of incidental take which could be authorized by incidental take permits and biological opinions, assuming a 30-year Plan term and the adoption of the suggested conservation strategy.
- **Conservation Strategy:** The program of management prescriptions and/or special management areas for a particular species which will, at a minimum, ensure that the taking will not jeopardize its continued existence in the wild.
- **Permit Compliance Summary:** The reasons why the conservation strategy would satisfy the requirements of the FESA and CESA permit issuance criteria, even assuming that all of the take authorized by permits occurs during the term of the Plan. The discussion explains how the recommended conservation strategy would allow measurable biological goals and objectives to be attained.

Separate chapters are devoted to the desert tortoise (Chapter 2) and the Mohave ground squirrel (Chapter 3) due to the complexity of the issues associated with those species. Conservation strategies for the remaining plants and animals are discussed in Chapter 4 (species which can be covered by an HCP) and Chapter 5 (species which are outside the scope of coverage that can be provided by an HCP, such as species found only on federal and/or state lands, but which could be addressed through measures adopted by agencies through their land use plans). Chapter 6 identifies plants and animals which the evaluators suggest be dropped from the list of species being addressed by the Plan. A map volume is also attached.

Table I-3 HCP OUTLINE

This table presents an HCP outline which could be utilized by the Supergroup when it writes the West Mojave Plan. Much of this information is drawn from a document prepared by the Service's Ventura Field Office titled *Habitat Conservation Plan and Implementation Agreement Templates for Section 10(a)(1)(B) Permits*.

Executive Abstract and Introduction

Chapter 1: Project Description

Planning Area: Describe the planning area. Descriptive elements should include the geographic location and acreage. The general environmental setting should be described with reference to primary habitats and any current factors affecting the environment in the project area, including growth trends and forecasts. Finally, current land uses and activities in and adjacent to the project area should be briefly presented, and land ownership discussed. A clear map is useful. The description need not be exhaustive, but should provide the reader with a realistic and accurate sense of the character and setting of the planning area. Only those elements relevant to the West Mojave Plan should be included.

Conservation Planning Process: The history of the development of the West Mojave Plan should be briefly discussed. Notable items include when the process began; participating parties such as landowners, local officials, environmental groups, public land users, and other government agencies; foundational meetings and consultations; and key decisions made during the development of the HCP. Legal and regulatory requirements should be addressed. Equitable Precepts should be discussed, indicating how and when they were developed and the purpose they serve.

Chapter 2: Biological Data and Species of Special Concern

Briefly describe all species being addressed by the West Mojave Plan, including those for which incidental take permit coverage or "no surprises" assurances are being sought. Species accounts can be incorporated by reference. Describe affected ecosystems and other pertinent biological information.

Chapter 3: Conservation Strategy

Address each species separately; in addition, describe the collective effect of all species programs, taken together (the "big picture"). Identify **measurable biological goals** for each species. Specific measures to be taken during implementation must be clearly defined, including **measures to minimize and mitigate impacts**, and proactive management programs. Success criteria should be clearly defined. Include a **monitoring** program which evaluates the effectiveness of the conservation strategy relative to defined success criteria; specify the data to be collected, the frequency of monitoring, who will conduct it and how the data will be analyzed, and how and when monitoring reports will be provided. The scope of monitoring should be commensurate with the scope of the conservation strategy. Monitoring should evaluate compliance, determine if biological goals are being met, and provide feedback to an adaptive management strategy. Describe **adaptive management** programs (especially for species for which information gaps exist) which utilize monitoring findings to modify the conservation strategy where necessary and, where appropriate, identify agreed-upon future changes that must be implemented as a result of monitoring findings. A time schedule of implementation that defines the order in which events will occur should also be included.

Table I-3 (Con't)

Chapter 4: Funding and Administration

Describe how the implementation of the Plan will be funded. Clearly state how much the Plan will cost including long-term maintenance and monitoring. Identify the source of the funding, who will manage the money, and how expenditures will be audited. Funding options could include collecting assessments or fees, appropriated agency funds, grants, or donations. If an endowment is to be established, its management should be described.

Chapter 5: Alternatives to the Proposed Plan

Both FESA and CESA require that alternatives to the taking of species be considered, and the reasons why such alternatives are not implemented be discussed. In addition, the EIR/S analysis will need to address alternatives. Any sort of reasonable alternative conservation strategy can be considered; these must include, however, a "no action" alternative and a "no take" alternative. The impacts of the alternatives should be briefly summarized, and the more detailed analysis of the EIR/S should be incorporated by reference.

Chapter 6: Changed and Unforeseen Circumstances

References and Literature Cited

HOW WAS THE EVALUATION CONDUCTED?

The recommendations presented in this report were developed during a series of meetings held between March 1998 and December 1998. Participants included biologists from the West Mojave planning team, the Service, the Department, and invited experts. The following information was made available to participants: (1) A "species account" for each plant or animal, prepared by a recognized expert, describing its distribution, natural history, habitat requirements, and population status, together with a threats analysis, recommended measures to address threats, and a bibliography; (2) hard copy maps and computer-generated and projected images; (3) a preliminary version of the CMS; and (4) applicable recovery plans. Findings and recommendations were recorded during each meeting by a West Mojave planning team biologist using a computer word processing program; agreed-upon text was projected on a meeting room wall, and was considered adopted only after all participants had reviewed, modified and accepted the text.

Evaluation meetings were structured around the following seven questions:

- How important is the planning area to the species as a whole?
- Does the planning area contain essential habitat for the species to complete its life history?
- Why was the species placed on the special status list? What is the concern?
- Is current management adequate to protect the species?
- Is the geographical size and location of conservation areas adequate to protect the

species? If not, what additional areas need to be committed to assure protection of the species?

- Is the management of proposed conservation areas adequate to protect the species? If not, what management improvements could be implemented to assure protection of the species within the target conservation areas.
- Is management of lands outside conservation areas adequate to protect the species? If not, what management improvements could be implemented to assure protection of the species outside conservation areas?

A FINAL NOTE: CESA “SECTION 2081 MANAGEMENT AUTHORIZATIONS”

Prior to May 1997, the Department authorized incidental take for state-listed species (such as the desert tortoise) by issuing “2081 Management Agreements” under its interpretation of the “management purposes” exception to CESA’s take prohibition. In April 1997, however, a California appellate court held this approach to be incompatible with CESA. (*Planning and Conservation League v. Department of Fish and Game* (1997) --- Cal.App.4th ---) As a result, the legislature amended CESA. A revised CESA section 2081 became effective in January 1998, which established a formal incidental take permit program comparable to the FESA section 10(a)(1)(B) permit (see above). This permit authorizes the incidental take of state-listed species. Throughout the remainder of this document, we refer to the Department’s authorization (historically and currently) where there is no state lead agency as a “2081 permit.”